



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,568	05/01/2001	Michael Christopher Martin	RSW920010076US1	4861

26502 7590 05/01/2006

IBM CORPORATION
IPLAW IQ0A/40-3
1701 NORTH STREET
ENDICOTT, NY 13760

EXAMINER

CHANG, JUNGWON

ART UNIT	PAPER NUMBER
----------	--------------

2154

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/846,568	Applicant(s) MARTIN ET AL.	
	Examiner Jungwon Chang	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/21/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Action is in response to RCE filed on 2/21/2006. Claims 1-11 are presented for examination.

2. IDS filed on 2/21/2006 is considered by the Examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 4-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarukkai (US 6,775,695), in view of Glance et al. (US 6,415,368), hereinafter Glance.

5. As to claim 1, Sarukkai discloses the invention substantially as claimed, including a method for adapting to change in a demand on a web server (col. 1, lines 22-30), comprising:

associating session tracking objects with browsers that access a web server (figs. 2-4; col. 2, lines 43-47; col. 4, lines 1-38, "traces are logs of client sessions on the Internet"), wherein the session tracking objects include web pages requested by the

Art Unit: 2154

browsers (figs. 2-4; col. 2, lines 43-47; col. 4, lines 1-38); and

analyzing the web pages requested by the browsers to determine caching priorities for the web server (col. 5, lines 27-33).

6. Although each web page is associated an identification (URL) that is known to one of ordinary skill in the art, Sarukkai does not specifically disclose identifications of web pages. Glance discloses identifications of web pages (col. 1, lines 14-16; col. 2, lines 43-45; col. 3, lines 10-58). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Sarukkai and Glance because Glance's identifications of web pages would be easily accessed by the server to assign a caching priority to each URL periodically (Glance, col. 6, lines 44-66).

7. As to claim 4, Sarukkai discloses wherein the session tracking objects are HTTP session objects (figs. 2-4; col. 2, lines 43-47; col. 4, lines 1-38).

8. As to claim 5, Sarukkai discloses wherein the caching priorities are proportional to relative frequencies of browser requests for web pages (col. 4, lines 39-61).

9. As to claim 6, Sarukkai discloses wherein the caching priorities are proportional to recency of browser requests for web pages (col. 1, line 66 – col. 2, line 2; col. 2, lines 38-42; col. 6, lines 21-30).

Art Unit: 2154

10. As to claim 7, Sarukkai discloses wherein the act of analyzing is performed periodically (col. 11, lines 8-13).

11. As to claim 8, Sarukkai discloses wherein the act of analyzing is performed in response to a triggering event (col. 8, lines 28-53, "requesting a document").

12. As to claims 9-11, they are rejected for the same reasons set forth in claim 1 above. In addition, Sarukkai discloses caching replacement algorithm (col. 5, line 48 – col. 6, lines 37). Using the caching replacement algorithm, the web pages stored in the cache are updated. Furthermore, Glance discloses altering a server cache responsive to the caching priorities (i.e., caching replacement algorithm; col. 1, lines 31-45; calculate priority weight of URL, update cache index, 68, fig. 2; update cache index with URL, weight, timestamp, 86, fig. 3; col. 8, lines 21-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sarukkai and Glance because Glance's altering the server cache would improve quality of service by periodically updating the server cache with newly calculated priority of web pages (col. 1, lines 31-45; calculate priority weight of URL, update cache index, 68, fig. 2; update cache index with URL, weight, timestamp, 86, fig. 3; col. 8, lines 21-23).

13. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarukkai, Glance, further in view of Ronald et al. (US 2003/0041143), hereinafter

Art Unit: 2154

referred to as Ronald.

14. As to claims 2 and 3, Sarukka and Glance do not specifically disclose the identifications of the last N pages requested by each of the browsers and N is five. Ronald discloses the identifications of the last N pages requested by each of the browsers (fig. 5; page 5, [0069], [0070]) and N is five (i.e., if user starting from page E – D – G – M – N, then N is five; or if user starting from page F – D – G – M – N, then N is five; fig. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sarukka, Glance and Ronald because Ronald's identification of the requested last pages would allow the web server to determine the popularity of each web page by analyzing the number of times users have visited the web pages.

Conclusion

15. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Isoyama et al, patent 6,546,422, Smith et al, patent 6,742,033, Cherkasova et al, patent 6,425,057, Cherkasova et al, patent 6,546,473 disclose caching protocol method and system based on request frequency and relative storage duration.

Art Unit: 2154

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is 571-272-3960. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Jungwon Chang'.

Jungwon Chang
April 26, 2006